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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,078	11/05/2003		Volker Kanm	038724.52864US	6297
23911	7590	04/06/2005		EXAMINER	
CROWELL & MORING LLP				CHAUDHRY, SAEED T	
INTELLECT	FUAL PR	OPERTY GROUP			
P.O. BOX 14300				ART UNIT	PAPER NUMBER
WASHINGTON, DC 20044-4300				1746	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	E.				
	10/701,078	KAMM, VOLKER					
Office Action Summary	Examiner	Art Unit					
	Saeed T. Chaudhry	1746					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 18 Ja	anuary 2005.						
	action is non-final.						
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) ⊠ Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) 27-29 is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-26 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.						
Application Papers							
9)☐ The specification is objected to by the Examine	г.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	: 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Ex		• •					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) □ All b) □ Some * c) ☒ None of: 1. ☒ Certified copies of the priority documents 2. □ Certified copies of the priority documents 3. □ Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary ((PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal Pa	te atent Application (PTO-152)					
Paper No(s)/Mail Date <u>11-5-03</u> .	6) Other:	117					

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DETAILED ACTION

Election/Restriction

Applicant's election with traverse of Group I, claims 1-26 in the reply filed on January 18, 2005 is acknowledged. The traversal is on the ground(s) that Group I and Group I should be allowed to proceed together because is the examiner allows the device claims of Group I, the claims Group II, which detail the processes of using the device of Group I, would also necessarily be patentable. If a new device is found to be patentable, the method of using that device is necessarily be patentable as well. This is not found persuasive because the apparatus as claimed can be used to practice another and materially different process such as coating inside surface of the installation. It is not necessarily true that if a device is patentable then the process will be patentable, since the device is capable of performing other processes such as coating. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United
- (c) he has abandoned the invention.
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate. by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- (f) he did not himself invent the subject matter sought to be patented.

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(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claims 1-3, 5-7, 9, 14, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallet et al.

Hallet et al (EP-0958,849) disclose an apparatus for cleaning an installation (100) having at least one cleaning unit (201) configured to move within the installation (100) to be cleaned; flexible connection (206) configured to supply a cleaning agent to the cleaning unit and to move with a movement of the cleaning unit (201). The lamellar elements (105) of settler (100) are cleaned by compressed air (cleaning agent) from a row of nozzles (cleaning unit, 201) which pass beneath the lamellae. Nozzles are mounted on chariot which moves at a speed of 1-100 cm/sec. The cleaning unit is a conveyance system which move back and forth beneath the tubes and capable of carrying as a carriage on a guide system (202, 204). The cleaning unit is capable of parking in the installation. The flexible tube (206) is coiled on a roller (207) and connected to a cleaning source (208) for cleaning agent. Hallet et al discloses all the limitations as claimed herein. Therefore, claims are anticipated by Hallet et al.

It should be noted that no patentable weight has been given to the preamble/intended use in that the body of the claim fails to recite any limitations that give life and meaning to the preamble/intended use. See MPEP 2111.02.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hallet et al in view of Horridge.

Hallet et al were discussed <u>supra</u>. However, the reference fails to disclose that nozzle is configured to be driven in a rotational movement.

Horridge (6,402,854) disclose a nozzle (10) which is configured to be driven in a rotational movement to facilitate cleaning of all areas of the inside surface (see col. 2, lines 15-17).

It would have been obvious at the time applicant invented the claimed apparatus to include a rotatable nozzle as disclosed by Horridge for the purpose of cleaning all the inside surfaces in one pass.

Claims 8, 10-11, 15, and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallet in view of Vowles.

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Hallet were discussed <u>supra</u>. However, the reference fails to disclose driving gear being connected to the cleaning unit with a power transmission element, a roller connected to the driving gear.

Vowles (5,265,671) disclose an apparatus for cleaning a bore of a tube by projecting a flexible conduit. The apparatus comprising a drum (1), (roller) with deep spiral grooves (2) for accommodation of a lance. A shaft (9) is made coaxial with the drum extending from one of its ends through its axial length of the drum beyond its other end. Shaft (9) is rotatably supported in threaded bearing (17). Part of the shaft extending beyond the drum is made hollow to accommodate ducting, which is connected to the outer end of the shaft by suitable swivel means (20) (see col. 2, lines 31-65). Drive motor (14) is mounted upon the outer face of end plate with its output shaft connected to shaft (13). As the drum rotates, co-operation of screw thread (10) on shaft (9) and screwed boss (17) causes the drum to axially displaced at a rate which continuously positions the point at which lance leaves deep spiral grooves of the drum adjacent the bore of fairlead (22) (see col. 3, line 65 through col. 4, lines 3).

It would have been obvious at the time applicant invented the claimed apparatus to include a power transmission element a driving gear and roller drum as disclosed by Vowles into the apparatus of Hallet et al for the purpose of controlling the hose movement through the installation since with the movement of the drum would give better and efficient control of the hose. Hose made of plastic material would have been matter of choice since plastic hose is produced cheaper than the other materials. The shaft is rotatably supported in threaded screw bearing (17). Therefore, one of ordinary skill in the art would include bearings which would move the roller in axial direction. The references did not disclose trapezoidal thread or multiplex trapezoidal thread. Vowles discloses to use screw thread (10) and screwed boss (17), which causes to axially displace the drum. One of ordinary skill in the art would replace a trapezoidal thread or multiplex trapezoidal thread with a screw thread since all would have given the same

result and it is matter of choice to use one the thread. Further, one of ordinary skill in the art would positioned the driving gear outside of the installation as disclosed by Hallet to prevent corrosion on driving gear with cleaning agents. The references fails to disclose a guide rail. One of ordinary skill in the art would use a guide rail instead of a cable for guiding the cleaning unit since guide rail are well known in the art for guiding on a guide rail.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallet in view of Vowles as applied to claim 10 above, and further in view of Smith.

Smith (5,402,809) discloses conveyor assembly 40 the assembly 40 is seen to be formed of a continuous stainless <u>steel chain</u> 310 which is positioned in driven relationship about main sprocket 232, and which extends through entrance opening 66 and exit opening 68 to be wound about secondary sprocket (see col. 11, lines 31-35).

It would have been obvious at the time applicant invented the claimed apparatus to include a stainless steel chain as disclosed by Smith into the apparatus of Hallet for the purpose of increased durability of the transmission element.

Prior art

Waite et al (4,944,320) disclose an apparatus for delivering jet water to a nozzle through a normally reeled hose.

Frauenfeld (4,141,754) discloses an apparatus for cleaning heat exchanger surfaces having a plurality of nozzles, and means for displacing nozzles relative to the planes of the plates.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Saeed T. Chaudhry
Patent Examiner

SUPERVISORY PATENT EXAMINER